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TESTIMONY OF
TERENCE G. ESVELT, ALLAN E. INGRAM, AND JOHN B. PYRCH
Witnesses for Bonneville Power Administration

SUBJECT: Conservation and Renewables Discount and Green Energy Premium

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1 TESTIMONY OF

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4
5 **SUBJECT: CONSERVATION AND RENEWABLES DISCOUNT AND GREEN**
6 **ENERGY PREMIUM**

7 **Section 1: Introduction and Purpose of Testimony**

8 *Q. Please state your names and qualifications.*

9 A. My name is Terence G. Esvelt and my qualifications are contained in WP-02-Q-BPA-20.

10 A. My name is Allan E. Ingram and my qualifications are contained in WP-02-Q-BPA-31.

11 A. My name is John B. Pyrch and my qualifications are contained in WP-02-Q-BPA-61.

12 *Q. What is the purpose of your testimony?*

13 A. The purpose of this testimony is to describe the Conservation and Renewable Discount
14 (C&R Discount) and the Green Energy Premium (GEP).

15 *Q. How is your testimony organized?*

16 A. Section 2 explains how the Bonneville Power Administration (BPA) is implementing the
17 Power Subscription Strategy goals to provide market incentives for the development of
18 conservation and renewables. Section 3 describes the C&R Discount and why it is being
19 proposed, the amount of the discount, and eligibility and participation in the
20 C&R Discount. Section 4 describes the GEP, why it is being proposed, and its
21 implementation.

Section 2: Providing Market Incentives

Q. The fourth Power Subscription Strategy goal states, in part, that BPA will “provide market incentives for the development of conservation and renewables. . .”. How does BPA intend to send pricing signals to encourage conservation and renewable resource development?

A. In the Initial Proposal, BPA is including a C&R Discount mechanism that is intended to create incremental efficiency gains and renewable energy supplies, and provide incentives to continue the region’s progress in low-income weatherization programs. This mechanism is designed to allow power customers to design conservation and renewable resource programs that best meet their needs.

Q. Why does BPA believe it is important to encourage conservation and renewable resource development?

A. BPA believes that the region will realize substantial value through lower energy costs, less pollution, less investment in transmission and distribution infrastructure, better customer service, and higher reliability by taking advantage of these resources and technologies. One of BPA’s missions is to promote the development of conservation and renewable resource development within the region.

Q. How are you proposing to provide incentives?

A. BPA’s Initial Proposal includes a discount of \$0.50 per megawatthour (MWh) of BPA purchases from selected rate schedules, for qualifying conservation and renewable resource investments.

Q. What will be the benefits of providing a discount?

A. BPA believes the discount will have the following benefits:

- (1) Create a catalyst in furthering the region’s own public purposes goals;

1 (2) Support state legislatures and regional power planning organizations as they
2 establish direction for the region's development of conservation and renewable
3 resources;

4 (3) Produce energy efficiency gains and increased renewable energy supplies; and

5 (4) Support and maintain BPA's competitive rate position in the power market.

6 *Q. Does BPA's Initial Proposal include alternatives to C&R Discount incentives that*
7 *encourage conservation and renewable resource?*

8 A. Yes, BPA has three additional alternatives. First, the Power Subscription Strategy stated
9 that BPA would make an "aggressive effort" to create and market "environmentally
10 preferred" power products from BPA's system and new renewable resources. As a part
11 of this strategy, BPA will market green power products during the Subscription window.

12 Second, BPA is proposing to augment the approximately \$30 million available
13 through the C&R Discount in two ways. BPA will designate the first \$15 million of any
14 dividend resulting from greater than expected revenues toward additional conservation,
15 renewable resource development and low-income weatherization. DeWolf, *et al.*,
16 WP-02-E-BPA-13 describes the dividend distribution process.

17 In addition, BPA has made the policy decision to review regional C&R Discount
18 annual spending levels for renewable resource development and low-income
19 weatherization. BPA expects regional spending to amount to \$6 million for renewable
20 resource development and \$4 million for low-income weatherization. If these levels are
21 not reached, BPA will make direct investments in renewable resources and low-income
22 weatherization to make up the shortfall. These investments will be made after
23 consultation with regional interests.

24 Third, BPA will reduce the risks of customers purchasing renewable resources
25 from third parties. BPA will accomplish this by allowing customers making eligible
26 types of renewable purchases to return to requirements service up to 200 average

1 megawatt (aMW) of load, previously supplied by renewable resources, at no additional
2 charge. This approach permits BPA to support customer renewable market purchases
3 consistent with the overall Power Subscription Strategy goals without additional direct
4 investment.

5 BPA's initial renewable power purchases have been reliable. BPA expects
6 third-party renewable suppliers provide levels of reliability similar to providers of
7 conventional market power. BPA does not expect to serve additional loads because of
8 this exemption. This exemption is discussed in Arrington, *et al.*, WP-02-E-BPA-24.

9 *Q. Why was 200 aMW selected as the cap for this exemption?*

10 A. BPA has reviewed proposed state portfolio standards for renewable energy content.
11 Based on this review, 3 percent is expected to be a reasonable estimate of the renewable
12 resource content in the future. Three (3) percent of the Subscription inventory is
13 approximately 200 aMW.

14 **Section 3: The Conservation and Renewables Discount**

15 *Q. Please describe the C&R Discount.*

16 A. The concept for the C&R Discount is related to the Comprehensive Review's
17 recommendation to Northwest states to sustain conservation and renewable resources
18 development and low-income weatherization. BPA's proposed C&R Discount will allow
19 its customers to act consistent with this recommendation and is consistent with §7(g) of
20 the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power
21 Act), which allows BPA to allocate conservation and renewable costs through rates. The
22 C&R Discount is a discount on the firm power rate available to customers purchasing
23 under the PF-02, RL-02, NR-02, and IP-02 rate schedules. By making the discount
24 available, BPA intends to provide incentives to customers to develop and acquire
25 conservation and renewable resources.

1 *Q. Is the C&R Discount related to the conservation surcharge mechanism included in the*
2 *Northwest Power Act?*

3 A. No. The C&R Discount is not related to the Conservation Surcharge that the
4 Administrator may impose as provided in §4(f)(2) of the Northwest Power Act. The
5 C&R Discount is not being adopted based on a recommendation made by the Northwest
6 Power Planning Council (NWPPC) to recover costs within states or political subdivisions
7 which have not implemented conservation measures. BPA is not proposing a
8 Conservation Surcharge at this time.

9 *Q. Would BPA impose a Conservation Surcharge, if recommended by the NWPPC?*

10 A. Pursuant to § 4(f)(2), the Administrator may choose to impose a surcharge based upon a
11 recommendation of the NWPPC to do so. The surcharge would apply to PF-02, RL-02,
12 NR-02, IP-02, and to Slice customers.

13 *Q. How was the C&R Discount developed?*

14 A. BPA held several public meetings through last fall and winter to discuss the fundamental
15 purpose and outline of the C&R Discount's features. The C&R Discount proposal was
16 developed as a result of these meetings. Development of the C&R Discount is based on
17 the principle that the customers' own initiatives and actions will best capture the benefits
18 and values of conservation and renewable resources. Making available a rate discount to
19 customers purchasing firm power in Subscription is appealing because it will allow
20 utilities to design and implement conservation or renewable programs to respond to local
21 circumstances, interests, and needs.

22 *Q. How will the discount be given to the customer?*

23 A. The discount will be given to the customer as a line item reduction in the customer's
24 monthly power bill. The monthly discount amount will be set prior to the rate period
25 based on the customer's Subscription power purchases. The discount will be deducted as
26 a dollar amount and will not affect calculation of other billing factors.

1 *Q. What is the amount of the discount?*

2 A. \$0.50 per MWh of power purchases made from selected BPA rate schedules.

3 *Q. How was the amount of the discount derived?*

4 A. The \$0.50 per MWh amount of the C&R Discount was derived after BPA evaluated
5 different cost factors. BPA examined what impact the Comprehensive Review's
6 recommendation for a public benefits spending goal of 3 percent would have on BPA's
7 customers. BPA's customers would be required to spend approximately \$60-80 million
8 annually to meet this goal. This target would have required a minimum \$1.50 per MWh
9 rate increase to fund the discount. BPA then reviewed its market position at that time and
10 determined that a \$1.50 per MWh rate increase to support conservation and renewable
11 resources activities would unacceptably erode the competitive position of BPA's power
12 price when compared with expectations of the Pacific Northwest (PNW) marketplace
13 during the rate period. After holding several public meetings to discuss the
14 C&R Discount with customers and interest groups, BPA determined that \$0.50 per MWh
15 would serve to appropriately incentivize incremental conservation and renewables
16 activity while maintaining the desired relationship between the market and BPA rates.

17 *Q. Why was a specific amount chosen?*

18 A. A specific charge per MWh applied to a customer's forecasted Subscription power
19 purchases will allow them to prepare fixed annual budgets for conservation and
20 renewables expenditures that are equal to their eligibility for the C&R Discount. Use of
21 this method also allows for simplified billing procedures.

22 *Q. Will the discount amount be applied to forecasted or actual loads?*

23 A. BPA will use forecasted Subscription power purchases to determine each customer's
24 discount eligibility. The use of actual loads would have made the discount amount
25 difficult to segregate for billing purposes. The actual discount would vary by month and
26

1 would be subject to revision in situations where bills must be estimated or corrected.

2 Low Density Discount calculations would also be complicated.

3 *Q. Has BPA identified any corrections to the C&R Discount Calculation and Application of*
4 *the Discount in Section II.A of the General Rate Schedule Provisions (GRSPs),*
5 *WP-02-E-BPA-07?*

6 A. Yes. The language in Section II.A. Part a, “The credit will equal the customer’s
7 forecasted average monthly Subscription contract (in megawatts) multiplied by the unit
8 discount,” is incorrect and should be replaced by, “The credit will equal the customer’s
9 forecasted average monthly Subscription purchases (in kilowatthours) multiplied by the
10 unit discount.”

11 *Q. Are there any other corrections to the C&R Discount Calculation and Application of the*
12 *Discount in Section II.A of the GRSPs, WP-02-E-BPA-07?*

13 A. Yes. The language in Section II.A. Part b, “For a participating customer buying power
14 from BPA under a Subscription contract for the entire five-year rate period, BPA will
15 determine the monthly dollar discount by multiplying the customer’s forecasted average
16 monthly power consumption over the period by the unit discount,” is incorrect and should
17 be replaced by, “For a participating customer buying power from BPA under a
18 Subscription contract for the entire five-year rate period, BPA will determine the monthly
19 dollar discount by multiplying the customer’s forecasted average monthly Subscription
20 purchases over the period by the unit discount.”

21 *Q. Did inclusion of the C&R Discount affect BPA’s net revenue requirements?*

22 A. No. BPA’s net revenue was determined independently of the C&R Discount. The
23 C&R Discount is a policy implemented through rates and is not part of BPA program
24 budgets. For a description of this rate treatment, *see* the Wholesale Power Rate
25 Development Study, WP-02-E-BPA-05.
26

1 Q. *Why are no energy savings attributed to the C&R Discount?*

2 A. The C&R Discount was developed as an alternative to centrally designed acquisition
3 programs and the traditional conservation planning process. BPA customers make the
4 actual conservation investments and, since there is no acquisition expenditure by BPA,
5 there will be no associated acquisition of energy savings.

6 Q. *Are customers purchasing under Pre-Subscription contracts eligible for the discount?*

7 A. In general, no, unless such customers have contracts with collar pricing provisions
8 allowing the contract price to be established equivalent to the PF-02 rate. Customers
9 with this type of pricing may therefore be eligible for the C&R Discount. Customers
10 with fixed priced Pre-Subscription contracts are not eligible. None of the customers with
11 Pre-Subscription contracts are eligible to share the \$15 million, if any, resulting from
12 dividends.

13 Q. *Are Slice customers eligible for the discount?*

14 A. Yes. Costs allocated to Slice customers will include a pro rata share of the total dollars
15 required to cover the C&R Discount.

16 Q. *Are investor-owned utility customers eligible for the discount?*

17 A. Yes. Investor-owned utility customers purchasing power under the NR-02, RL-02 or PF
18 Exchange Subscription rate schedules are eligible for the C&R Discount. However, the
19 PF Exchange Program Rate does not include the C&R Discount. Customers purchasing
20 under the PF Exchange Program rate are not eligible for the C&R Discount. (See
21 Doubleday, *et al.*, WP-02-E-BPA-18.)

22 Q. *Has BPA identified any corrections to the Priority Firm Exchange Program Power
23 Charges in Section IV.H (1) of the 2002 Power Rate schedules, WP-02-E-BPA-07?*

24 A. Yes. The Adjustments, Charges, and Special Rate Provisions table in Section IV. H. (1)
25 Part c, includes the Conservation and Renewables Discount. This entry is incorrect and
26 should be deleted.

1 *Q. Are direct-service industrial (DSI) customers eligible for the discount?*

2 A. Participation in the C&R Discount by DSI customers purchasing Subscription firm power
3 under the IP rate may be limited by the floor rate established by §7(c)(2) of the
4 Northwest Power Act. These customers will be eligible as long as the C&R Discount
5 does not lower their rate below the floor rate. DSI customers participating in the
6 Compromise Approach will be eligible for the C&R Discount. The DSI Compromise
7 Approach policy is described in Berwager, *et al.*, WP-01-E-BPA-09. Doubleday, *et al.*,
8 WP-02-E-BPA-18 describes inclusion of the C&R Discount in pricing of the DSI
9 Compromise Approach.

10 *Q. How will BPA determine whether the customer is participating in the discount?*

11 A. For revenue forecasting purposes, it is assumed that all eligible customers will participate
12 in the discount. The C&R Discount will be reflected on all customers' bills automatically
13 during the first year of the rate period. Actual eligibility will be determined based on the
14 actions the purchaser takes to implement or support conservation and renewable
15 resources development in the region. Customers will be able to use specific activities or
16 measures developed by the Regional Technical Forum (RTF) as approved by BPA to
17 qualify for the discount.

18 *Q. How will BPA monitor customer C&R Discount implementation progress?*

19 A. Customers will be required to submit annual progress reports comparing their
20 expenditures with their C&R Discount eligibility. When the rate period for the
21 customer's contract expires, the customer is required to submit a final statement.
22 Customers will be required to reimburse BPA money when qualifying C&R Discount
23 expenditures are less than the customer's C&R Discount eligibility.

24 *Q. What is the RTF?*

25 A. The RTF is a regional body established by the NWPPC to provide peer review and advice
26 to the NWPPC, BPA, and the region's utilities on conservation and renewable resources.

1 The 17 members of the RTF were selected by the NWPPC based on expertise and
2 experience from a list of nominees provided by stakeholders. Membership consists of
3 individuals drawn from utilities, the private sector, BPA, public interest, state and local
4 government, academic and national laboratory personnel. The RTF will collect, review
5 and distribute existing protocols for verification and evaluation. The RTF will also
6 develop and promulgate new methods in response to new information and/or new
7 approaches to achieving conservation savings. The RTF will track regional progress by
8 developing standardized forms and data definitions for use by retail electricity
9 distribution utilities, state and local low-income weatherization service providers, and
10 renewable resource developers. The RTF will compile the data submitted and publish an
11 annual regional summary. In addition, the RTF will provide feedback and suggestions
12 for improving the effectiveness of the conservation and renewable resource programs and
13 approaches of the region.

14 *Q. Why was the RTF asked to develop and recommend a list of qualifying measures for*
15 *BPA's C&R Discount?*

16 *A.* Because the RTF performs several activities that are closely related to what is needed to
17 support BPA's C&R Discount rate mechanism, BPA believes it is reasonable to consider
18 its recommendations. BPA believes that it is more efficient to use the expertise and
19 experience of the RTF rather than try to establish another technical entity to support the
20 needs of the C&R Discount. The region has limited technical resources in this area and it
21 is believed that working together with the RTF will be the most logical way to achieve
22 the best results for the PNW. The synergy that will result from a joint effort will benefit
23 both the RTF and the C&R Discount.

24 *Q. How will the RTF develop the list of qualifying measures for the C&R Discount?*

1 A. BPA will provide the RTF with policy guidelines and direction about what it needs to
2 implement the C&R Discount. The RTF will conduct its business as an independent,
3 advisory body.

4 *Q. What kind of information will the RTF provide?*

5 A. It will make recommendations to BPA regarding the following:

- 6 1. A list of conservation measures and programs, the estimated savings associated with
7 those measures and programs, and the estimated regional power system value
8 associated with those savings.
- 9 2. A process for updating the list as technology and standard practices change and an
10 appeals process through which customers can demonstrate that different savings and
11 value estimates should apply.
- 12 3. A set of protocols by which the savings and system value of measures/programs not
13 on the list could be estimated. These would include complex commercial or
14 industrial projects.
- 15 4. Criteria for renewable resource research and development projects.
- 16 5. Recommended protocols for measurement and evaluation of savings or production.

17 *Q. What else will the RTF do?*

18 A. The RTF will analyze the reporting information submitted by customers to BPA to claim
19 their discounts in order to track the kinds of conservation being implemented, the costs
20 and electricity savings achieved, and the quantities and types of renewable resource
21 production achieved with the discount.

22 *Q. How will this information be used?*

23 A. The purpose is to provide a regional-level assessment of the effectiveness of the
24 C&R Discount. The RTF will also have the ability to carry out, through staff or
25 contractors, a limited number of targeted evaluations.

26 *Q. What is the relationship between BPA and the RTF?*

1 A. BPA will not delegate any of its authority to the RTF. All recommendations developed
2 by the RTF must be approved by BPA before they can be listed as qualifying activities or
3 measures. BPA will also retain the right to conduct a financial audit of customers'
4 participation in the C&R Discount.

5 *Q. Are there any penalties if customers do not participate in qualified activities?*

6 A. There are no penalties. However, utilities not qualifying for, or not participating in, the
7 C&R Discount will pay a higher price for BPA power and will not be eligible for revenue
8 dividends distributed to participants.

9 **Section 4: Green Energy Premium**

10 *Q. Please describe the Green Energy Premium (GEP).*

11 A. The GEP is a dollar amount that is paid in addition to the applicable rate charged to
12 customers participating in the purchase of "Green Energy." These customers will
13 establish a power portfolio that includes Environmentally Preferred Power (EPP), along
14 with their firm Subscription purchases, for purposes of qualifying for potential future
15 energy portfolio mandates and to meet the needs of environmentally conscious retail
16 consumers. The GEP is a pricing approach applied to customers that choose to designate
17 any portion (zero to 100 percent) of their Subscription purchases as EPP. Customers
18 selecting the GEP will continue to receive system power deliveries from BPA. In
19 addition, these customers will receive EPP production documentation showing that their
20 GEP purchases have resulted in the delivery of EPP to the system.

21 *Q. Why was the GEP developed?*

22 A. BPA previously provided customers the opportunity to purchase EPP through surplus
23 firm power sales under the FPS-96 rate schedule at negotiated prices. Because the
24 continued availability of surplus firm power that is sold under the FPS-96 rate schedule is
25 uncertain in the next rate period, BPA developed the GEP to meet future demand by
26 customers wanting to purchase EPP under Subscription firm power sales contracts.

1 Therefore, BPA needed an alternative method for customers to purchase EPP. The GEP
2 may be made available to meet the needs of other customers contemplating market
3 purchases of green energy after the Subscription window closes.

4 Q. *Is the GEP limited to requirements firm power purchases?*

5 A. Yes. These purchases require a customer to commit a portion of its load, served at a
6 posted firm power rate, to service at the posted rate plus the GEP. This is done by
7 designating any portion of the customer's Subscription purchase as EPP. Because of the
8 uncertainty of available surplus firm power in the next rate period, BPA will not make
9 EPP available to non-Subscription customers while the Subscription window is open.
10 GEP availability to non-Subscription customers will be determined after the Subscription
11 window closes. The GEP will be available to customers purchasing power under the
12 Priority Firm (PF-02), Industrial Firm Power (IP-02), Residential Load (RL-02), and
13 New Resources (NR-02) rate schedules. Subject to the availability of surplus firm power,
14 sales of EPP under the FPS-96 rate schedule may be offered in the future.

15 Q. *Is there any limit to the amount of energy that can be purchased under the GEP?*

16 A. Yes. The amount of EPP subject to the GEP will be limited by the availability of EPP
17 resources and the customer's Subscription firm power purchase. Customers may
18 purchase EPP energy from existing BPA resources, or, from BPA's acquisition of
19 non-BPA resources if total customer demand exceeds the existing BPA resources.
20 Acquisition costs of non-BPA resources will be included in the GEP.

21 Q. *How will BPA price GEP?*

22 A. The GEP will be negotiated and range from zero to \$40/MWh depending on the specific
23 resource types selected by each customer. The customer's power bill will have a new
24 line item showing the elected EPP energy amount in MWh times the GEP.

25 Q. *Please describe the costs included in the GEP.*

1 A. The negotiated GEP for any specific customer will include all applicable costs associated
2 with the purchase. Such costs may include: (1) costs of existing EPP resources, over and
3 above the cost of BPA system resources; (2) costs of new EPP resources, over and above
4 the cost of BPA system resources; (3) costs of BPA system resources; (4) endorsement
5 fees for specific EPP resources; (5) market purchases of EPP resources matching
6 customer specifications; and (6) transmission and other services required to integrate EPP
7 resources into the BPA system.

8 *Q. Does the proposed GEP affect the determination of BPA's revenue requirement?*

9 A. No. When the GEP is based upon existing BPA resources, BPA will incur no additional
10 costs but will accrue additional revenues. Where the output of non-BPA resources is
11 acquired to meet GEP requests, the GEP customer will pay all associated incremental
12 costs. To the extent incremental GEP revenue is received, it will benefit BPA's
13 customers at large. BPA forecasts no sales of EPP and thus no revenue from the GEP.

14 *Q. What other pricing alternatives to the GEP did BPA consider?*

15 A. BPA investigated a number of different rate mechanisms to meet the regional demand for
16 EPP. BPA considered two other pricing approaches in addition to the GEP.

17 *Q. Please describe the approaches BPA considered.*

18 A. The first approach BPA considered was to develop a separate requirements rate for EPP.
19 Such a rate may be pursued in the future. A rate for EPP could be structured based on the
20 type of resource used or a combination of such resources. For example, a portfolio
21 consisting of 40 percent solar and 60 percent wind might have a rate equal to the
22 weighted rate of the two resource components. BPA does not believe it is necessary at
23 this time to develop a separate EPP requirements rate because BPA does not differentiate
24 between its generation resources, except for the limited purpose of providing EPP
25 through payment of the GEP. Having a separate requirements energy rate for EPP would
26 further complicate the billing process relative to implementing the GEP.

1 An additional energy rate could create a need for additional line items for each Point of
2 Delivery on the system, thus creating additional administrative overhead during bill
3 preparation and correction. Also, BPA would be required to resolve complicated rate
4 directive issues.

5 *Q. Please describe the second alternative that BPA considered.*

6 A. As a second alternative, BPA considered using the specific shares of the output of EPP
7 resources acquired in the future to price the associated EPP. This idea resembles the
8 “Slice of the System” product and would have required customers desiring such resources
9 to contribute to construction and ownership of these new resources. This approach,
10 however, does not easily fit into BPA’s proposed rate structure. Therefore, BPA did not
11 pursue it.

12 *Q. Does this conclude your testimony?*

13 A. Yes.
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